# Chapter NR 103

# WATER QUALITY STANDARDS FOR WETLANDS

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**Note:** Chapter NR 103 as it existed on July 31, 1991 was repealed and a new chapter NR 103 was created effective August 1, 1991. Corrections made under s. 13.93 (2m) (b) 7., Stats., Register, August, 1997, No. 500.

# Subchapter I — Standards

- **NR 103.01 Purpose. (1)** The purpose of this chapter is to establish water quality standards for wetlands. Chapters NR 102, 104 and 105 and this subchapter provide water quality standards for waters of the state pursuant to s. 281.15 (2) (b), Stats.
- (2) Water quality standards are intended to protect public rights and interest, public health and welfare and the present and prospective uses of all waters of the state for public and private water supplies, propagation of fish and other aquatic life and wild and domestic animals, preservation of natural flora and fauna, domestic and recreational uses, and agricultural, commercial, industrial and other uses. In all cases where the potential uses are in conflict, these water quality standards for wetlands shall be administered to protect the general public interest.
- (3) This subchapter sets forth the conditions necessary to protect water quality related functions and values of wetlands including sediment and pollutant attenuation, storm and flood water retention, hydrologic cycle maintenance, shoreline protection against erosion, biological diversity and production and human uses such as recreation.
- **(4)** Water quality standards serve as a basis for developing and implementing strategies to achieve legislative policies and goals. These standards also serve as a basis for decisions in regulatory, permitting, planning or funding activities that impact water quality and which impact wetlands.

**History:** Cr. Register, July, 1991, No. 427, eff. 8–1–91.

### **NR 103.02 Definitions.** In this chapter:

- (1) "Areas of special natural resource interest" means areas as listed in s. NR 103.04 recognized by the state or federal government as possessing special ecological, cultural, aesthetic, educational, recreational or scientific qualities.
- **(1m)** "Artificial wetland" means a landscape feature where hydrophytic vegetation may be present as a result of human modifications to the landscape or hydrology and for which there is no prior wetland or stream history.
- **(2)** "Farm pond" means any artificially created open water area used solely for the purpose of watering livestock.
- (3) "Surface waters" means all natural and artificial named and unnamed lakes and all naturally flowing streams within the boundaries of the state, but not including cooling lakes, farm ponds and facilities constructed for the treatment of wastewaters.
- (4) "Waters of the state" includes those portions of Lake Michigan and Lake Superior within the boundaries of Wisconsin, and all lakes, bays, rivers, streams, springs, ponds, wells, impounding reservoirs, marshes, watercourses, drainage systems and other surface or ground water, natural or artificial, public or private, within the state or its jurisdiction.
- (5) "Wetlands" means an area where water is at, near or above the land surface long enough to be capable of supporting aquatic

or hydrophytic vegetation and which has soils indicative of wet conditions.

**History:** Cr. Register, July, 1991, No. 427, eff. 8–1–91; cr. (1m), Register, May, 1998, No. 509, eff. 6–1–98.

- **NR 103.03 Wetland water quality standards. (1)** To protect, preserve, restore and enhance the quality of waters in wetlands and other waters of the state influenced by wetlands, the following water quality related functional values or uses of wetlands, within the range of natural variation of the affected wetland, shall be protected:
- (a) Storm and flood water storage and retention and the moderation of water level fluctuation extremes;
- (b) Hydrologic functions including the maintenance of dry season streamflow, the discharge of groundwater to a wetland, the recharge of groundwater from a wetland to another area and the flow of groundwater through a wetland;
- (c) Filtration or storage of sediments, nutrients or toxic substances that would otherwise adversely impact the quality of other waters of the state;
- (d) Shoreline protection against erosion through the dissipation of wave energy and water velocity and anchoring of sediments:
- (e) Habitat for aquatic organisms in the food web including, but not limited to fish, crustaceans, mollusks, insects, annelids, planktonic organisms and the plants and animals upon which these aquatic organisms feed and depend upon for their needs in all life stages;
- (f) Habitat for resident and transient wildlife species, including mammals, birds, reptiles and amphibians for breeding, resting, nesting, escape cover, travel corridors and food; and
- (g) Recreational, cultural, educational, scientific and natural scenic beauty values and uses.
- **(2)** The following criteria shall be used to assure the maintenance or enhancement of the functional values identified in sub. (1):
- (a) Liquids, fill or other solids or gas may not be present in amounts which may cause significant adverse impacts to wetlands:
- (b) Floating or submerged debris, oil or other material may not be present in amounts which may interfere with public rights or interest or which may cause significant adverse impacts to wetlands:
- (c) Materials producing color, odor, taste or unsightliness may not be present in amounts which may cause significant adverse impacts to wetlands;
- (d) Concentrations or combinations of substances which are toxic or harmful to human, animal or plant life may not be present in amounts which individually or cumulatively may cause significant adverse impacts to wetlands;
- (e) Hydrological conditions necessary to support the biological and physical characteristics naturally present in wetlands shall be protected to prevent significant adverse impacts on:
  - 1. Water currents, erosion or sedimentation patterns;

- 2. Water temperature variations;
- The chemical, nutrient and dissolved oxygen regime of the wetland;
  - 4. The movement of aquatic fauna;
  - 5. The pH of the wetland; and
  - 6. Water levels or elevations.
- (f) Existing habitats and the populations of wetland animals and vegetation shall be maintained by:
  - 1. Protecting food supplies for fish and wildlife,
  - 2. Protecting reproductive and nursery areas, and
- 3. Preventing conditions conducive to the establishment or proliferation of nuisance organisms.

**History:** Cr. Register, July, 1991, No. 427, eff. 8–1–91; CR 00–164: am. (1) (g), Register January 2002 No. 553, eff. 2–1–02.

- NR 103.04 Wetlands in areas of special natural resource interest. Wetlands in areas of special natural resource interest includes those wetlands both within the boundary of designated areas of special natural resource interest and those wetlands which are in proximity to or have a direct hydrologic connection to such designated areas. For purposes of this chapter, the following are designated as areas of special natural resource interest:
- (1) Cold water communities as defined in s. NR 102.04 (3) (a), including all trout streams and their tributaries and trout lakes;
  - (2) Lakes Michigan and Superior and the Mississippi river;
- (3) State and federal designated wild and scenic rivers, designated state riverways and state designated scenic urban waterways, s. 30.26, Stats., ch. NR 302, 16 USC 1271 to 1287, ss. 30.40 to 30.49, Stats., and s. 30.275, Stats.;
- (4) Unique and significant wetlands identified in special area management plans (SAMP), special wetland inventory studies (SWIS), advanced delineation and identification studies (ADID) and areas designated by the United States environmental protection agency under section 404(c), 33 USC 1344 (c);
  - (5) Calcareous fens:
- **(6)** Habitat used by state or federally designated threatened or endangered species, s. 29.604, Stats., ch. NR 27 and 16 USC 1531 to 1543;
  - (7) State parks, forests, trails and recreation areas;
- **(8)** State and federal fish and wildlife refuges and fish and wildlife management areas;
- **(9)** State and federal designated wilderness areas (16 USC 1131 to 1135 and s. NR 1.415);
- **(10)** Designated or dedicated state natural areas established under ss. 23.27 to 23.29, Stats.;
  - (11) Wild rice waters; and
- (12) Any other surface waters identified as outstanding or exceptional resource waters in ch. NR 102.

History: Cr. Register, July, 1991, No. 427, eff. 8–1–91; CR 00–164: am. (4) and (11), Register January 2002 No. 553, eff. 2–1–02; corrections in (1) and (6) made under s. 13.93 (2m) (b) 7., Stats., Register March 2005 No. 591.

## Subchapter II — Implementation

- **NR 103.05 Purpose. (1)** The purpose of this subchapter is to establish implementation procedures for application of the wetland water quality standards contained in subch. I.
- **(2)** Whenever the procedures of this subchapter are applicable to an activity, they shall supersede the regulatory provisions of s. NR 1.95 (5).

**Note:** NR 1.95 (5) was repealed eff. 8–1–01.

**(3)** These procedures are promulgated under ss. 281.11, 281.12 (1), 281.15, 281.37, and 283.001, Stats.

**History:** Cr. Register, July, 1991, No. 427, eff. 8–1–91; CR 00–164: am. (3), Register January 2002 No. 553, eff. 2–1–02.

- **NR 103.06 Applicability.** The provisions of this chapter shall, subject to the provisions below, apply to all department regulatory, planning, resource management, liaison and financial aid determinations that affect wetlands. This chapter shall only apply to specific activities which may require authorization or reauthorization after August 1, 1991 and which are subject to the requirements of statute or rules requiring a department determination concerning effects on water quality or wetlands.
- (1) Activities subject to the requirements of this chapter include, but are not limited to:
- (a) Permits, reviews, approvals and other actions under chs. 23 and 26 to 31, Stats.;
- (b) Permits and approvals under chs. 281, 283, 289 and 291, Stats., except as provided in sub. (3);
  - (c) Water quality certification under ch. NR 299;
  - (d) Permits and approvals under chs. NR 500 to 520;
  - (e) Department development and management projects; and
  - (f) Actions under ch. NR 120.
- (2) In addition to the requirements of s. NR 207.03 (5), this chapter shall apply to new or increased point source discharges to wetlands.
- (3) Wetland alterations which are directly caused by operations on a metallic mineral prospecting site or mining site shall be regulated pursuant to specific wetland standards under chs. NR 131 and 132, respectively.
- (4) EXEMPTIONS. A person who proposes a project that may affect an artificial wetland shall notify the department at least 15 working days prior to initiating the project. For purposes of this chapter, the following artificial wetlands are exempt from the provisions of this chapter unless the department notifies the applicant within 15 working days from when the department receives notice of the proposed project from the applicant that the artificial wetland has significant functional values or uses under s. NR 103.03 (1) (e), (f) or (g):
- (a) Sedimentation and stormwater detention basins and associated conveyance features operated and maintained only for sediment detention and flood storage purposes;
- (b) Active sewage lagoons, cooling ponds, waste disposal pits, fish rearing ponds and landscape ponds.
  - (c) Actively maintained farm drainage and roadside ditches.
- (d) Artificial wetlands within active nonmetallic mining operations.

**Note:** This chapter does not apply to activities which are exempted from state and federal regulations. Examples include certain silvicultural and agricultural activities exempted under ch. 30, Stats., and s. 404 of the Clean Water Act (33) USC 1344. This chapter is not applicable to local zoning decisions.

**History:** Cr. Register, July, 1991, No. 427, eff. 8–1–91; cr. (4), Register, May, 1998, No. 509, eff. 6–1–98.

### NR 103.07 Definitions. As used in this subchapter:

- (1) "Expansion activities of existing cranberry operations" means expansions of existing cranberry beds, "squaring-off" of existing cranberry beds, construction of new cranberry beds adjacent to existing beds, rehabilitation of abandoned beds, construction of dikes for subdivision of an existing reservoir, and the construction or extension of dikes for reservoir expansion.
- **(1m)** "Mitigation project" means the restoration, enhancement or creation of wetlands to compensate for adverse impacts to other wetlands. "Mitigation project" includes using credits from a wetland mitigation bank.
- (2) "Practicable alternatives" means available and capable of being implemented after taking into consideration cost, available technology and logistics in light of overall project purposes.
- (3) "Water dependency" or "wetland dependency" means the activity is of a nature that requires location in or adjacent to surface waters or wetlands to fulfill its basic purpose.
- (4) "Wetland mitigation bank" means a system of accounting for wetland loss and compensation that includes one or more sites

where wetlands are restored, enhanced or created to provide transferable credits to be subsequently applied to compensate for adverse impacts to other wetlands.

**(5)** "Working day" means any day except Saturday, Sunday and holidays designated under s. 230.35 (4) (a), Stats.

**History:** Cr. Register, July, 1991, No. 427, eff. 8–1–91; cr. (1) and renum. (1) and (2) to be (2) and (3), Register, May, 1998, No. 509, eff. 6–1–98; CR 00–164: cr. (1m), (4), and (5), Register January 2002 No. 553, eff. 2–1–02.

- NR 103.08 Department determinations. (1) The department shall review all proposed activities subject to this chapter and shall determine whether the project proponent has shown, based on the factors in sub. (3), if the activities are in conformance with the provisions of this chapter. The department shall, upon request, meet with a project proponent and other interested persons to make a preliminary assessment of the scope for an analysis of alternatives and the potential for compliance with this chapter.
- **(1k)** (a) For the purposes of reviewing an application under this chapter, the department may require submission of information consistent with s. NR 299.03 (1).
- (b) The department shall review the application for completeness within 30 days of receipt of the application. The department shall notify the applicant of any additional information reasonably necessary to review the application. An application may not be considered complete until the requirements of the Wisconsin environmental policy act, s. 1.11, Stats., have been met.
- (c) The applicant shall submit, at any time during the review process, additional information which the department finds to be reasonably necessary for review of the application.
- (d) The department shall protect as confidential any information, other than effluent data, submitted under this chapter which meets the requirements of s. 283.55 (2), Stats., and under s. NR 2.19.
- (e) For all activities that meet the criteria listed in sub. (4) (c) 3. and that do not require authorization under ch. 30, Stats., the department shall make a final decision on an application within 60 working days of receipt of a complete application from the project proponent.
- (f) The 60 working day limit does not apply if the department determines that weather conditions prevent the department from making a decision in that time frame.
- (1m) The department may rely upon wetland boundary determinations made by other agencies and consultants. If there is a dispute concerning a wetland boundary delineation, the review of the delineation shall be consistent with the procedures identified in the "Basic Guide to Wisconsin's Wetlands and Their Boundaries" (Wisconsin Department of Administration PUBL–WZ–029–94) as determined by the department.

**Note:** This guide is based upon the "Corps of Engineers Wetlands Delineation Manual, 1987" which has been regionalized for Wisconsin. Copies of "Basic Guide to Wisconsin's Wetlands and Their Boundaries" may be obtained from Wisconsin Department of Administration, Document Sales Unit, 202 S. Thornton Ave., P.O. Box 7840, Madison, WI 53707–7840.

- **(2)** Wetland functional values and the impact of a proposed activity upon those functional values shall be determined using wetland ecological evaluation methods accepted by the department and appropriate to the affected wetland. The department shall consider available land use studies in its determinations.
- **(3)** To protect all present and prospective future uses of wetlands, the following factors shall be considered by the department in making determinations under this section:
  - (a) Wetland dependency of the proposal;
- (b) Practicable alternatives to the proposal which will avoid and minimize adverse impacts to wetlands and will not result in other significant adverse environmental consequences;
- (c) Impacts which may result from the activity on the maintenance, protection, restoration or enhancement of standards under s. NR 103.03;

- (d) Cumulative impacts attributable to the proposed activity which may occur, based upon past or reasonably anticipated impacts on wetland functional values of similar activities in the affected area:
- (e) Potential secondary impacts on wetland functional values from the proposed activity; and
- (f) Any potential adverse impacts to wetlands in areas of special natural resource interest as listed in s. NR 103.04.
- (g) Any potential adverse impact to wetlands in environmentally sensitive areas and environmental corridors identified in areawide water quality management plans.
- **(4)** (a) Except as provided in par. (b), (c) or (d), the department shall make a finding that the requirements of this chapter are satisfied if it determines that the project proponent has shown all of the following:
- 1. No practicable alternative exists which would avoid adverse impacts to wetlands.
- If subd. 1. is met, all practicable measures to minimize adverse impacts to the functional values of the affected wetlands have been taken.
- 3. If subds. 1. and 2. are met, utilizing the factors in sub. (3) (b) to (g) and considering potential wetland functional values provided by any mitigation project that is part of the subject application, that the activity will not result in significant adverse impacts to wetland functional values, significant adverse impacts to water quality or other significant adverse environmental consequences.
- (b) For all activities that will adversely affect a wetland in an area of special natural resource interest as listed in s. NR 103.04 or that will adversely affect an area of special natural resource interest, the department may not consider potential functional values provided by any mitigation project that is part of the subject application.
- (c) For all activities which meet one or more of subd. 1., 2. or 3., the department, utilizing the factors in sub. (3) and considering potential wetland functional values provided by any mitigation project that is part of the subject application, shall make a finding that the requirements of this chapter are satisfied if it determines that the project proponent has shown that the activity will not result in significant adverse impacts to wetland functional values, significant adverse environmental consequences. The department may limit the scope of the analysis of alternatives under sub. (3) (b), as determined at the preliminary assessment meeting under sub. (1).
  - 1. The activity is wetland dependent.
- 2. The surface area of the wetland impact, which includes impacts noted in s. NR 103.08 (3), is 0.10 acres or less.
- 3. All wetlands that may be affected by an activity are less than one acre in size, located outside a 100-year floodplain, and not any of the following types:
  - a. Deep marsh.
  - b. Ridge and swale complex.
- c. Wet prairie not dominated by reed canary grass (*Phalaris arundinacea*) to the exclusion of a significant population of native species.
  - d. Ephemeral pond in a wooded setting.
- e. Sedge meadow or fresh wet meadow not dominated by reed canary grass (*Phalaris arundinacea*) to the exclusion of a significant population of native species and located south of highway 10.
  - f. Bog located south of highway 10.
  - g. Hardwood swamp located south of highway 10.
  - h. Conifer swamp located south of highway 10.
  - i. Cedar swamp located north of highway 10.
- (d) For cranberry operations, the department, utilizing the factors in sub. (3) (b) to (g), shall make a finding that the requirements of this chapter are satisfied if it determines that the project propo-

nent has shown that the activity will not result in significant adverse impacts to wetland functional values, significant adverse impacts to water quality or other significant adverse environmental consequences. For the purposes of determining whether there is a practicable alternative to a proposed expansion of an existing cranberry operation, the analysis shall be limited to alternatives within the boundaries of the property where the existing cranberry operation is located and on property immediately adjacent to the existing cranberry operations. For new cranberry operations, a practicable alternatives analysis shall be conducted which includes off—site alternatives.

(e) Mitigation projects and the use of wetland mitigation banks

shall be carried out in accordance with ch. NR 350 and any memorandum of agreement between the department and the United States army corps of engineers that establishes guidelines for mitigation projects and wetland mitigation banks.

Note: Examples of wetland ecological evaluation methods include, but are not limited to, "Wetland Evaluation Technique" (FHWA/COE), "Wisconsin Wetland Evaluation Methodology", "Hollands-Magee" (IEP/Normandeau), "Minnesota Wetland Evaluation Methodology for the North Central United States" and the "Wisconsin Department of Natural Resources Rapid Assessment Method".

**Note:** Examples of available land use studies include Special Area Management Plans (SAMP), Special Wetland Inventory Studies (SWIS) and Advanced Delineation and Identification Studies (ADID).

History: Cr. Register, July, 1991, No. 427, eff. 8–1–91; cr. (1m) and (4) (c), am. (4) (a) 1. and (b), Register, May, 1998, No. 509, eff. 6–1–98; CR 00–164: am. (1) and (3) (b), cr. (1k) and (3) (g), r. and recr. (4), Register January 2002 No. 553, eff. 2–1–02.